



### Sodium Hypochlorite

<b>Properties</b>	
Appearance	Colorless to Yellowish liquid
Boiling point	Decomposes
Fusion point	-25 °C (Sol. at 12% NaOCl)
Specific Gravity	1.13 of 100 g/l available chlorine at 20 °C
Physical state	Liquid
Solubility in water	It is 100% soluble in water
pH	>9
Odour	Chlorine like Odour
Vapour Pressure	17.5 mmHg at 20 °C

<b>Chemical Identity</b>	
Formula: NaOCl	CAS No.
Molecular Weight	74.5
UN No.	1791

<b>Specifications</b>	
Relative density (25 °C/25 °C) Min	1.20
Available Chlorine (as Cl), % by mass by volume	12.5 to 15.0
Total Chlorine, % by volume (as Cl)	12.5 to 15.0
Free alkali (as NaOH), g/l, Min.	10.0
Free Sodium Carbonate (as Na <sub>2</sub> CO <sub>3</sub> ), g/l, Max.	0.5
Iron (as Fe), ppm, Max	1.0
Sodium Chlorate	Traces

Note: We can also meet user's specifications.

#### Applications

**Bleaching:** Sodium hypochlorite is one of the first, if not the first, chemical bleaching developed and produced in large amounts by the industry. It is one of the most powerful bleaching agents available and it is very much applied in the bleaching of pulp and paper and textile fibers. Thanks to its remarkable ability to eliminate stains and coloration, the product is also traditionally used in household cleaning to remove particularly resistant stains.

**Disinfection:** Sodium hypochlorite is also one of the most effective disinfecting agents. Its ability to pass through the cell membranes, joined to its high chemical potential,

permits the product to kill practically every kind of microorganism, even at low temperature and low concentration. Due to that, sodium hypochlorite is widely used in industrial and household applications for fast and ensured disinfecting action. It is also widely used in the sterilization of potable water.

**Oxidation:**

Sodium hypochlorite shows a very high chemical potential. This property is exploited in a wide range of chemical reactions.

**Packaging**

Sodium Hypochlorite	M.S.R.L. Road tankers.
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**Safety / Precaution:**

Avoid contact with eyes, skin & clothing. It should be stored in cool, dark & covered place. To avoid decomposition it should not be allowed to come in contact with acids & other chemicals.

**First Aid Measures**

- Eyes : Flush eyes with a stream of water for atleast 15 minutes
- Skin : Flush thoroughly with cool water under shower while removing contaminated clothing and shoes. Discard non rubber shoes
- Inhalation : Remove to fresh air
- Ingestion : If swallowed, do not induce vomiting, although it may occur spontaneously.